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SHORT COMMUNICATION

What bothers the sick-listed employee with severe MUPS?

R HOEDEMAN^{1,2}, AH BLANKENSTEIN³, PC KOOPMANS^{1,2} & JW GROOTHOFF²

¹Department of Science, 365 Occupational Health Services, Utrecht, The Netherlands, ²Department of Health Sciences, University Medical Center Groningen, University of Groningen, Groningen, The Netherlands, and ³Department of General Practice, VU University of Amsterdam, EMGO Institute for Health and Care Research, Amsterdam, The Netherlands

Abstract

Aims: The aim of this study was to explore what employees with severe medically unexplained physical symptoms (MUPS) experience as causes of distress with regard to employees with mild or no MUPS. **Methods:** This study is an additional analysis of a cross-sectional study in which 486 sick-listed employees, were assessed with Patient Health Questionnaire (PHQ)-15 for self-rated levels of MUPS. A cut-off score of 15 (≥ 15) was used to categorise employees with severe MUPS. Distress was qualitatively categorised with the answers on the open question in the PHQ-15 “if you experience distress at this moment, what are you distressed about?” **Results:** Sick-listed employees with severe MUPS were most distressed by their medical, mental, and financial problems. Employees with mild or no MUPS by their medical, work-related, and return to work-related problems. Employees with severe MUPS had more often distress by their mental and financial problems, compared to the employees with mild and no MUPS, who had more often no problems. **Conclusions: There are differences in the causes of distress in sick-listed employees with severe MUPS compared to those with mild or no MUPS. Exploring these causes create possibilities for the physician to improve the quality of explanations and reassurance to the employee and to remove barriers for the return to work process.**

Key Words: Distress, medically unexplained physical symptoms, occupational health physician, sick-listed employees

Background

The association between medically unexplained physical symptoms (MUPS), psychiatric comorbidity, and distress is well known in the working population [1–6]. The specific associations between MUPS and distress have less often been studied. Haahr et al. [1] found associations between MUPS, health anxiety, high medical consumption, and poor work outcomes. Studies [2,3] found associations between MUPS, high levels of distress, and work-related factors, but causal relations were not clear. From earlier studies in the general and occupational population, we know that health anxiety is an important determinant of MUPS, medical consumption and distress [6–8]. In the working population, employees have low levels of MUPS [4] compared to the high levels in sick-listed employees [6,9–11].

Physicians find patients with MUPS and psychiatric comorbidity difficult to manage and a difficult relationship between physician and patient is inversely associated with the degree the complaints are caused by somatic reasons [11]. Therefore it is important to know what employees with MUPS think about the causes of their distress, otherwise they won't feel being understood [12–15] and they may neglect advice and therapies proposed by the occupational health physician (OHP).

The current report is an additional analysis based on the data from our cross-sectional and longitudinal studies [6,16] in all-cause sick-listed employees. We hypothesised that employees with severe MUPS would be more distressed by factors related to the causes and treatment of their symptoms and less

Correspondence: R Hoedeman, Department of Science, 365 Occupational Health Services, Zwarte Woud 10, 3524 SJ Utrecht, The Netherlands.
E-mail: rob.hoedeman@365.nl

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distressed by work-related factors than employees with mild or no MUPS.

Materials and methods

Type of study

The present study has a cross-sectional design.

Population and sampling

Patients. Sick-listed employees were included in the study from April 2006 until December 2007. Their characteristics have been reported elsewhere [6]. Employees with severe MUPS had levels of distress 1.7-times higher than employees with mild or no distress.

Occupational health physicians. Forty-three OHPs from five group practices, covering two large occupational health services in the Netherlands, participated in this study. These group practices provided services to organisations with different sizes and from different branches, located in urban and rural areas.

Data collection. During a 6-week period, for each participating group practice, all sick-listed employees who had an appointment with the OHP were sent a questionnaire 1 week before the actual consultation. A researcher (RH) collected these questionnaires just before the consultation with the OHP.

Material

Patient questionnaires. The employee was asked to fill in questionnaires about his or her socio-demographic variables and also questionnaires on:

- (a) MUPS, assessed with the Patient Health Questionnaire (PHQ)-15, which rates how much the patient has been bothered, during the past 4 weeks (score 0–2), by 15 common somatic symptoms that rarely have organic causes. The total score ranges from 0–28 in women to 0–30 in men. The cut-off point of 15 (PHQ-15 ≥ 15) is comparable with clinically representative samples [17,18].
- (b) Distress, assessed with the distress subscale of the Four-Dimensional
- (c) Symptom Questionnaire (4DSQ) [4].
- (d) Causes of distress, assessed qualitatively with one open question on the PHQ: “If you experience distress at this moment, what are you distressed about”?

Analyses

Qualitative categorisation of causes of distress. The answers to the open-ended question were independently and blinded to the other results categorised by the first two authors. The categories should cover the main problem and discriminate between categories. Finally nine categories could be differentiated. If the employee had given more answers which could be categorised to two or more categories, the first given answer was chosen. The categories chosen by the two authors were compared, and the differences were solved by discussion until consensus was reached.

Statistical analysis. For the employee’s MUPS score, the data were dichotomised to a PHQ 15+ group (severe MUPS) and a PHQ 15– group (less severe, or no MUPS). We analysed the categorical variables with the chi-squared test or Fisher’s Exact test.

All analyses were performed in SPSS for Windows 18.0.

Results

Table I presents the causes of distress reported by the sick-listed employees. In the group with severe MUPS, the three most frequently reported causes of distress are medical, mental and private problems. Causes reported most frequently by employees with mild or no MUPS are medical, work-related, and RTW-related problems. Significant differences between employees with severe MUPS versus mild or no MUPS are that employees with severe MUPS more often report mental and financial problems as causes of distress, whereas employees with less MUPS more often report no problems at all.

Discussion

All sick-listed employees are bothered by their medical problems. This is in line with the literature [7] and confirms our hypothesis that for sick-listed employees medical problems cause more distress than work-related problems. Distinctions are that employees with severe MUPS have higher levels of distress and that they have longer duration of sickness absence [16]. The results of this study show further that employees with severe MUPS could be more often distinguished by distress about their comorbid mental symptoms and worries about financial problems. Health anxiety, number of symptoms, and age are prognostic factors for an unfavourable course in employees with MUPS [6–8]. Health anxiety contributes to selective attention of bodily symptoms [7] and increased medical consumption and depressive

Table I. Causes of distress in all-cause sick-listed employees with severe MUPS and mild or no MUPS: between-group comparison.

Cause of distress	PHQ 15+ (<i>n</i> =68)	PHQ 15- (<i>n</i> =379)	<i>P</i> -value
Medical problems	27.9	29.5	0.915
Work-related problems	11.8	19.2	0.175
Problems related to RTW	10.3	17.3	0.180
Private problems	16.2	14.6	0.665
Combination of work and private problems	1.5	0.8	0.482
Financial problems	5.9	1.1	0.021
Mental problems	23.5	8.9	<0.001
Other causes	2.9	2.2	0.653
No problems	0.0	6.5	0.036

Values are %.

MUPS, medically unexplained physical symptoms; PHQ, Patient Health Questionnaire; RTW, return to work.

symptoms lower the threshold for experiencing pain and distress [19,20].

Strengths and limitations

The study has some limitations. Firstly, self-report questionnaires were used to assess MUPS. Secondly, this was a cross-sectional study. Causal relations are not clear. Thirdly the sample of employees had a long duration of sickness absence [16], so the results are not representative for employees with short-term sickness absence. Strengths of the study is that the sample concerns an all-cause and representative population of sick-listed employees, with assessment by validated instruments of MUPS, distress and the causes of distress.

Implications for research

Longitudinal studies in larger samples of working employees are needed to study causal relations: for example, whether mental symptoms and financial problems precede MUPS (mediated by health anxiety) or in reverse order (which would indicate that employees with MUPS become more vulnerable to comorbid mental symptoms and worrying about financial problems) in working employees, from which employees at risk make a transition to a sick-listed status. Associations could also be reciprocal (indicating reinforcement between MUPS, mental symptoms, and financial problems).

There is lack of studies about the diagnosis and treatment of employees with severe MUPS regarding work-related outcomes as functioning and sickness absence. Most evidence is from studies in primary and secondary care populations and therefore indirect. Employees with severe MUPS can be detected more early by use of questionnaires like the PHQ-15 and 4DSQ. Needed are studies in which employees with high scores on such questionnaires (indicating a

high somatic symptom severity) and hampering returning to work are referred early to treatments in which they are active like graded activity and multidisciplinary treatment. Other (qualitative) studies are needed to study how physicians can motivate employees with severe MUPS more effectively to participate in treatments which are focused on recovery in functioning.

Practical implications

The results show that the OHP is doing well by primarily exploring and addressing the medical complaints of the employee, as these are a major cause of distress themselves. For employees with severe MUPS, the exploration should be broadened to the mental problems as they give much distress. In this respect, use of questionnaires as the PHQ and 4DSQ are helpful. After establishing the diagnosis, the symptoms, what is good treatment, and what are the consequences with regard to the return to work (RTW) can be explained to the employee. The patient-centered and multifactorial approach is in line with guidelines for management of MUPS [21–23]. When symptoms are very serious or troublesome, the employee can be referred for psychological, psychiatric, or multidisciplinary treatment [21–23].

Furthermore, the data show that the OHP should explore which contextual factors are of importance. An important point of our results is that the employee, due to the distress, is probably not aware of the consequences of the symptoms with regard to hampering the RTW process. In contrast, the OHP should be aware of this and guide the employee in the RTW process and enhance the employee–employer relationship.

The general conclusion is that, although distress is not the determinant of levels of MUPS [6] and longer sickness absence [16], it is important to recognise high levels of distress and to explore the underlying

causes. The OHP should help the employee to stay aware of the RTW process.

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References

- [1] Haahr JPL, Frost P and Andersen JH. Predictors of health related job loss: a two-year follow-up study in a general working population. *J Occup Rehabil* 2007;17:581–92.
- [2] Godin I, Kittel F, Copietters Y, et al. A prospective study of cumulative job stress in relation to mental health. *BMC Public Health* 2005;5:67.
- [3] Fagring AJ, Kjellgren K, Rosengren A, et al. Depression, anxiety, stress, social interaction and health-related quality of life in men and women with unexplained chest pain. *BMC Public Health* 2008;8:165.
- [4] Terluin B, Van Rhenen W, Schaufeli WB, et al. The Four-Dimensional Symptom Questionnaire (4DSQ): measuring distress and other mental health problems in a working population. *Work Stress* 2004;18:187–207.
- [5] De Waal MWM, Arnold IA, Eekhof JAH, et al. Somatoform disorders in general practice. *Br J Psych* 2004;184:470–476.
- [6] Hoedeman R, Krol B, Blankenstein AH, et al. Severe MUPS in a sick-listed population: a cross-sectional study on prevalence, recognition, psychiatric co-morbidity and impairment. *BMC Public Health* 2009;9:440.
- [7] Barsky AJ, Ahern DK, Bailey ED, et al. Hypochondriacal patients' appraisal of health and physical risks. *Am J Psych* 2001;158:783–7.
- [8] Jackson LJ, Passamonti M. The outcomes among patients presenting in primary care with a physical symptom at 5 years. *J Gen Intern Med* 2005;20:1032–7.
- [9] Eriksen HR, Ihlebaek C, Jansen JP, et al. The relations between psychological factors at work and health status among workers in home care organizations. *Int J Behav Med* 2006;13:182–92.
- [10] Al Windi A. Determinants of complaints symptoms in a Swedish health practice – results of a questionnaire survey. *J Psychosom Res* 2004;57:307–16.
- [11] Hansen A, Edlund C and Bränholm I-B. Significant resources needed for return to work after sick leave. *Work* 2005;25:231–40.
- [12] Hahn SR, Thompson KS, Willis TA, et al. The difficult doctor-patient relationship: somatization, personality and psychopathology. *J Clin Epidemiol* 1994;47:647–57.
- [13] Epstein RM, Hadee T, Carroll J, et al. “Could this be something serious?” Reassurance, uncertainty, and empathy in response to patients' expressions of worry. *J Gen Int Med* 2007;22:1731–9.
- [14] Salmon P, Ring A, Humphris GM, et al. Primary care consultations about medically unexplained symptoms: how do patients indicate what they want. *J Gen Int Med* 2009;24:450–6.
- [15] Norrmen G, Svärdsudd K and Andersson DKG. How primary care physicians make sick listing decisions: The impact of medical factors and functioning. *BMC Fam Pract* 2008;9:3.
- [16] Hoedeman R, Blankenstein AH, Krol B, et al. The contribution of high levels of somatic symptom severity to sickness absence duration, disability and discharge. *J Occup Rehab* 2010;20:264–73.
- [17] Spitzer RL, Kroenke K and Williams JB. Validation and utility of a self-report version of PRIME-MD: the PHQ primary care study. Primary Care Evaluation of Mental Disorders. *Patient Health Questionnaire JAMA* 1999;282:1737–44.
- [18] Interian A, Allen LA, Gara MA, et al. Somatic complaints in primary care: Further examining the validity of the Patient Health Questionnaire (PHQ-15). *Psychosomatics* 2006;47:392–8.
- [19] Hotopf M, Mayou R, Wadsworth M, et al. Psychosocial and developmental antecedents of chest pain in young adults. 1999;61:861–7.
- [20] Chiu YH, Silman AJ, Macfarlane GJ, et al. Poor sleep and depression are independently associated with a reduced pain threshold. Results of a population based study. *Pain* 2005;115:316–21.
- [21] Henningsen P, Zipfel S and Herzog W. Management of functional somatic syndromes. *Lancet* 2001;369:946–55.
- [22] Trimbos Institute. *Multidisciplinaire richtlijn. Somatisch onvoldoende verklaarde lichamelijke klachten en somatoforme stoornissen [Multidisciplinary guideline. Somatically insufficiently explained physical symptoms and somatoform disorder]*. Utrecht: Trimbos Institute, 2011.
- [23] National Institute for Health and Clinical Excellence. Guideline 53: *Chronic fatigue syndrome/myalgic encephalomyelitis (or encephalopathy)*. London: NICE, 2007.